



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 81

[EPA-R06-OAR-2018-0624; FRL-9986-54-Region 6]

Air Quality Designation for the 2010 Sulfur Dioxide (SO₂) Primary National Ambient Air

Quality Standard; Arkansas;

Redesignation of the Independence County Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: On April 20, 2018, the State of Arkansas (AR), through the Arkansas Department of Environmental Quality (ADEQ) submitted a request for the Environmental Protection Agency (EPA) to assess new available information and redesignate the Independence County, AR unclassifiable area (hereinafter referred to as the “County” or “Area”) for the 2010 sulfur dioxide (SO₂) primary national ambient air quality standard (NAAQS) to attainment/unclassifiable. The EPA is proposing that it now has sufficient information to determine that the Area is attaining the 2010 SO₂ primary NAAQS, and, therefore, is proposing to approve the State’s request and redesignate the Area to attainment/unclassifiable for the 2010 primary SO₂ NAAQS.

DATES: Comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R06-OAR-2018-0624 at <https://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Mr. Ruben Casso, (214) 665-6763, casso.ruben@epa.gov. To inspect the hard copy materials, please schedule an appointment with Mr. Casso.

SUPPLEMENTARY INFORMATION: Throughout this document “we,” “us,” or “our” means the EPA.

I. Background

The Clean Air Act (CAA or Act) establishes a process for air quality management through the establishment and implementation of the NAAQS. After the promulgation of a new

or revised NAAQS, EPA is required to designate all areas of the country, pursuant to section 107(d)(1) of the CAA. For the 2010 SO₂ primary NAAQS, designations were based on the EPA's application of the nationwide analytical approach to, and technical assessment of, the weight of evidence for each area, including but not limited to available air quality monitoring data and air quality modeling results. The EPA issued updated designations guidance through a March 20, 2015, memorandum from Stephen D. Page, Director, U.S. EPA, Office of Air Quality Planning and Standards, to Air Division Directors, U.S. EPA Regions 1– 10 titled, "Updated Guidance for Area Designations for the 2010 Primary Sulfur Dioxide National Ambient Air Quality Standard," which contains the factors the EPA intends to evaluate in determining the appropriate designations and associated boundaries, including: (1) Air quality characterization via ambient monitoring or dispersion modeling results; (2) emissions-related data; (3) meteorology; (4) geography and topography; and (5) jurisdictional boundaries. The guidance also references the EPA's non-binding Monitoring Technical Assistance Document (Monitoring TAD) and Modeling Technical Assistance Document (Modeling TAD),¹ which contain scientifically sound recommendations on how air agencies should conduct such monitoring or modeling.

Entergy Corporation Independence Steam Electric Station (Independence Station). Independence Station is located in northeastern Arkansas in the eastern portion of Independence County, approximately 5 kilometers (km) southeast of Newark, Arkansas. Independence Station is a large Electrical Generating Unit that was included in the list of facilities to be designated

¹ "Sulfur Dioxide (SO₂) National Ambient Air Quality Standards Designations Modeling Technical Assistance Document". August 2016 draft <https://www.epa.gov/sites/production/files/2016-0706/documents/areadesignso2modelingtad.pdf>. Note. the EPA released earlier drafts of this document in May and 2013 and February 2016.

pursuant to a March 2, 2015 Consent Decree.² There is one other major emitter of SO₂ in Independence County.³ The Future Fuel Corporation facility (Future Fuel) located approximately 12 km to the west-northwest of Independence Station.

Independence County was designated unclassifiable on July 12, 2016.⁴ The unclassifiable designation was based on the information the state of Arkansas and the Sierra Club provided to the EPA. Specifically, the designation and associated boundaries were based on the EPA's evaluation of the State's air dispersion modeling analysis, as well as the additional modeling analysis submitted by Sierra Club for the area surrounding Independence Station. In summary, the EPA's evaluation of the state's modeling supported the need for refined emission estimates for the Future Fuel facility to accurately assess potential maximum impacts in Independence County. Both ADEQ's and Sierra Club's previous modeling provided to the EPA in 2015 and 2016 were premised on several factors that were not consistent with recommendations in the Modeling TAD and were unreliable for determining whether the area was or was not meeting the 2010 SO₂ NAAQS. After careful evaluation of the State's recommendation, all timely comments and information received, the EPA concluded that it could not determine whether the area around the Independence Station was meeting or not meeting the 2010 SO₂ primary NAAQS and designated that area unclassifiable in July 2016. The boundaries for this designation were the jurisdictional boundaries of Independence County, based upon the State's recommendation, its submitted analysis and our concurrence on the State's reasoning.

² See *Sierra Club et al. v. McCarthy*, Civil Action No. 3:13-cv-3953-SI (N.D. Cal.), and 79 FR 31325 (June 2, 2014).

³ Sources over 100 tons per year emissions of SO₂ using EPA's 2014 National Emission Inventory.

⁴ 2010 SO₂ primary NAAQS Round 2 Designations for Arkansas were signed on June 30, 2016, and can be found at 81 FR 45039, July 12, 2016.

Detailed rationale, analyses, and other information supporting our original designation for this area can be found in the final action's technical support document for Arkansas.⁵ This document, along with all other supporting materials for the original 2010 SO₂ primary NAAQS designation for Independence County, can be found at www.regulations.gov in Docket ID EPA-HQ-OAR-2014-0464. The technical support document for this proposed action is included in the docket for this action (Docket EPA-R06-OAR-2018-0624).⁶

II. What are the criteria for redesignating an area from unclassifiable to attainment/unclassifiable?

Section 107(d)(3)(A) provides that the Administrator may notify the Governor of any state that the designation of an area should be revised “on the basis of air quality data, planning and control considerations, or any other air quality-related considerations the Administrator deems appropriate.” The Act further provides in section 107(d)(3)(D) that even if the Administrator has not notified a state Governor that a designation should be revised, the Governor of any state may, on the Governor's own motion, submit a request to revise the designation of any area, and the Administrator must approve or deny the request.

When approving or denying a request to redesignate an area, the EPA bases its decision on the air quality data for the area as well as the considerations provided under section 107(d)(3)(A).⁷ The EPA defines an attainment/unclassifiable area⁸ as: an area for which

⁵ Final AR SO₂ designation TSD can be found at www.regulations.gov; Docket EPA-HQ-OAR-2014-0464-0410)

⁶ See “Independence Redesignation TSD.pdf”.

⁷ While CAA section 107(d)(3)(E) also lists specific requirements for redesignations, those requirements only apply to redesignations of nonattainment areas to attainment and, therefore, are not applicable in the context of a redesignation of an area from unclassifiable to attainment/unclassifiable.

⁸ Historically, the EPA has designated most areas that do not meet the definition of nonattainment as “unclassifiable/attainment.” EPA has reversed the order of the label to be “attainment/unclassifiable” to better convey the definition of the designation category and so that the category is more easily distinguished from the

available information does not indicate that the area violates the NAAQS or contributes to ambient air quality in a nearby area that does not meet the NAAQS or an area for which the EPA has determined the available information indicates the area meets the NAAQS and does not indicate the area contributes to ambient air quality in a nearby area that does not meet the NAAQS. We are proposing to find that Independence County would fall under the second definition.

III. What is EPA's rationale for proposing to redesignate the Area?

Independence County was designated unclassifiable by the EPA on July 12, 2016. As discussed previously, modeling results provided by Arkansas and Sierra Club in 2015 and 2016 were not refined enough to make a clear determination of the area's attainment status. Since that designation, the EPA has worked with ADEQ and the two facilities in refining the modeling approaches and inputs resulting in modeling that is acceptable for assessing whether the area is attaining or not attaining the 1-hour SO₂ NAAQS. Specifically, ADEQ and the facilities have made refinements in the modeling including: revising Future Fuel's emissions estimates to vary emissions based on coal usage, using more accurate stack parameters and utilizing a meteorological approach which employs the EPA-generated Weather Research and Forecasting (WRF) meteorological modeling and the Mesoscale Model InterFace (MMIF) program to generate representative meteorological data for the Independence County area. The original modeling used 2012-2014 meteorological data from the Little Rock area which is over 70 miles from Future Fuel and Independence Station, so ADEQ wished to use the new 2013-2015 WRF

separate unclassifiable category. *See, e.g.*, 83 FR 1098, 1099 (January 9, 2018) and 83 FRN 25776, 25778 (June 4, 2018). EPA reserves the "attainment" category for when EPA redesignates a nonattainment area that has attained the relevant NAAQS and has an approved maintenance plan.

based data to better represent the local meteorology in Independence County. EPA worked with ADEQ to review the meteorological modeling results within the region and at surrounding meteorological stations to assess whether the meteorological model was performing adequately. EPA also assessed whether the use of the WRF data with 12 km grid resolution was acceptable for simulating the meteorological data for Independence County. EPA determined model was acceptable to simulate the meteorological parameters in Independence County and EPA approved the use of the WRF/MMIF meteorological data for use in AERMOD⁹ modeling of Independence County.¹⁰ This approval is included in the docket for this action (Docket EPA-R06-OAR-2018-0624). ADEQ submitted an updated analysis and letter signed by Governor Asa Hutchinson on April 20, 2018 requesting that the EPA redesignate Independence County, Arkansas as attainment/unclassifiable for the 1-hour SO₂ primary NAAQS.

According to the EPA's guidance on redesignations, SO₂ nonattainment areas using modeling to demonstrate attainment for a redesignation request would be expected to use maximum allowable emissions.¹¹ However, these statements derive from the requirements of CAA section 107(d)(3)(E), which do not pertain to the redesignation of unclassifiable areas. For redesignations of unclassifiable areas, the necessary analysis is equivalent to what would be required in a designation in the first instance since we have not found the area to be attainment or nonattainment. In this first instance, the goal is to establish existing ambient air quality. As such, it is appropriate to use actual emissions for estimating existing air quality. The EPA's

⁹ American Meteorological Society (AMS) and U.S. Environmental Protection Agency (EPA) Regulatory Model (AERMOD). AERMOD is the preferred regulatory model listed in 40 CFR Part 51 App. W for atmospheric dispersion of primary pollutants within 50 km in this terrain situation.

¹⁰ Email from Mr. Erik Snyder of EPA Region 6 to Mr. David Clark of ADEQ on January 23, 2018 approving the use of surface and upper air data from WRF/MMIF for a representative location in Independence County, Arkansas.

¹¹ Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions, April 2014, at 67; Kent Berry Memorandum "Use of Actual Emissions in Maintenance Demonstrations for ozone and Carbon Monoxide (CO) Nonattainment Areas," Nov. 30, 1993, at 3.

acceptance of modeling using actual emissions¹² in this instance should not be construed to define what would be needed for a demonstration of attainment and maintenance for purposes of a redesignation of a nonattainment area to attainment.

The EPA has reviewed the modeling provided by the state with their redesignation request and finds that it comports with the EPA's, current Modeling TAD¹³ and the EPA's Guideline on Air Quality Models (40 CFR Part 51 Appendix W) and is acceptable for assessing the attainment status of Independence County, Arkansas. The state's modeling indicates that the predicted maximum Design Value at any receptor in the modeling domain is 159.6 $\mu\text{g}/\text{m}^3$, or 60.92 parts per billion (ppb).¹⁴ The EPA's review confirms the modeling results appropriately characterize the air quality in Independence County, Arkansas and that predicted ambient SO₂ concentrations are below the 2010 SO₂ primary NAAQS of 196.4 $\mu\text{g}/\text{m}^3$, or 75 ppb.

IV. Proposed Action

The EPA is proposing to approve Arkansas' April 20, 2018, request to change the EPA's previous designation and redesignate Independence County from unclassifiable to attainment/unclassifiable for the 2010 SO₂ primary NAAQS. The EPA has reviewed the modeling provided by the state with its redesignation request and finds that it comports with the EPA's, current Modeling TAD and the EPA's Guideline on Air Quality Models (40 CFR Part 51 Appendix W) and is acceptable for assessing the attainment status of Independence County,

¹² Actual emissions were used for most sources with the exception of using allowables for a few minor sources at the Future Fuel facility.

¹³ "Sulfur Dioxide (SO₂) National Ambient Air Quality Standards Designations Modeling Technical Assistance Document". August 2016 draft <https://www.epa.gov/sites/production/files/2016-0706/documents/areadesignso2modelingtad.pdf>. Note. the EPA released earlier drafts of this document in May and 2013 and February 2016.

¹⁴ The SO₂ NAAQS and the Design Value compared to the NAAQS is the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations.

Arkansas. If finalized, approval of the redesignation request would change the legal designation for the Area, found at 40 CFR part 81, from unclassifiable to attainment/unclassifiable for the 2010 SO₂ primary NAAQS.

V. Statutory and Executive Order Reviews

Under the CAA, redesignation of an area to attainment/unclassifiable is an action that affects the status of a geographical area and does not impose any additional regulatory requirements on sources beyond those imposed by state law. A redesignation to attainment/unclassifiable does not in and of itself create any new requirements. Accordingly, this proposed action merely proposes to redesignate an area to attainment/unclassifiable and does not impose additional requirements. For that reason, this proposed action:

- is exempt from review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because it is exempt under Executive Order 12866;
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is not subject to the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- is not subject because it does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

- is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it does not establish an environmental standard intended to mitigate health or safety risks;
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because this action does not involve technical standards;
- will not have disproportionate human health or environmental effects under Executive Order 12898 (59 FR 7629, February 16, 1994); and
- does not have Tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000) because no tribal lands are located within the Area and the redesignation does not create new requirements. The EPA notes this proposed action will not impose substantial direct costs on Tribal governments or preempt Tribal law.

List of Subjects in 40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: November 16, 2018.

Anne Idsal,

Regional Administrator, Region 6.

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